ZAKIA SULTANA SIMIN

zakianotes@gmail.com | +8801615039127 | linkedin.com/in/zakia-sultana-simin

PROFESSIONAL SUMMARY

Electrical and Electronic Engineering graduate with a strong foundation in electrical engineering fundamentals, artificial intelligence, cybersecurity, and applied research. Passionate about teaching, mentoring students, and conducting high-quality research. Seeking a position in academia to contribute to academic excellence through innovative instruction, student development, and collaborative research.

EDUCATION

Bangladesh University of Engineering and Technology (BUET) **October 2026 – Present**

M.Sc. in Information Security

- Department: Institute of Information and Communication Technology (IICT)
- Status: Enrolled

Military Institute of Science and Technology **2022 – 2026**

B.Sc. in Electrical and Electronic Engineering (EEE)

- Department: Electrical, Electronics and Communication Engineering (EECE)
- Cumulative GPA: **3.93/4.00**

Holy Cross College | *Higher Secondary Certificate* **2021**

- GPA: 5.00
- Group: Science

Shaheed Bir Uttam Lt. Anwar Girls' College | *Secondary School Certificate* **2019**

- GPA: 5.00
- Group: Science

RESEARCH EXPERIENCE

- **Information-Sharing Structures for Joint Modulation Classification and SNR Estimation Under Rayleigh and Rician Fading** — Submitted to *IEEE Transactions on Cognitive Communications and Networking*, August 2026.
- **DUALSAF: Dual-Branch Semantic and Anomaly Fusion Transformer for IoT Intrusion Detection** — Manuscript in preparation.
- **Lightweight Explainable Intrusion Detection for IoT Using Deep Learning** — Accepted and presented at ECCT 2026, Taylor & Francis Book Chapter.
- **Temporal Window-Based Intrusion Detection for IIoT Attacks Using Transformers and Explainability** — Submitted to ICEFronT 2026.
- **Artifact-Aware U-Net for Efficient Detection of AI-Generated Facial Images** — Submitted to ICEFronT 2026.
- **Towards Real-Time Tea Leaf Disease Management: A Deep Learning Solution for Resource-Constrained Environments** — IEEE WIECON-ECE 2025. DOI: 10.1109/WIECON-ECE69386.2025.11525971
- **A Machine Learning Approach for Classification and Identification of Important ROIs for ADHD-I** — IEEE ECCE 2025. DOI: 10.1109/ECCE64574.2025.11013824

PROJECTS

IoT-Enabled Smart Waste Monitoring and Segregation System | *Tools: ESP32, Arduino Uno, Arduino IDE* **2025**

- Developed a microcontroller-based IoT-enabled smart waste monitoring and segregation system using ultrasonic, water-level, and metal sensors with web integration, location tracking, and SMS notifications.

Password Protection System with Wrong Attempt Counter | *Tools: Proteus Pro, Logic ICs* **2024**

- Designed a digital password authentication system with a three-attempt lockout mechanism using logic ICs without a microcontroller.

Smart Solar Tracking System | *Tools: LDR Sensors, Servo/DC Motor* **2023**

- Developed an automatic solar tracking system using LDR sensors and motor control for real-time sunlight detection and optimal photovoltaic panel orientation.

Comparative Analysis of Horn and Parabolic Antennas | *Tools: CST Studio Suite* **2025**

- Designed and simulated Ku-band horn and parabolic reflector antennas, comparing gain, VSWR, beamwidth, and radiation characteristics.

EXPERIENCE & LEADERSHIP

Prime University **September 25, 2026 – Present**

Lecturer, Department of Electrical and Electronic Engineering (EEE)

- Teaching Electrical Circuits I (Theory), Electrical Circuits I and II (Sessional), and Physics courses covering Thermodynamics, Optics, Waves, and Oscillations.

Grameenphone Ltd. | *Nextern, Technology Infrastructure Management* **June 2026 – September 2026**

- Automating telecom site billing and supporting VAT compliance, reducing manual processing time by approximately **50–70%**.
- Managing Technology Infrastructure Management data and Power BI dashboards; contributing to a MyGP youth-engagement initiative (up to **30%**) and the Futuremakers AI Business Competition organizing team.

IEEE AP-S MIST Student Branch Chapter | *Chair* **March 2025 – April 2026**

- Led **5+** technical workshops, STEM events, and chapter activities by coordinating executive members and volunteers.
- Directed a **5-session** SolidWorks training program for **50+** participants, managing registrations, promotions, technical support, Google Classroom, and assessment of **4** assignments.

MIST Robotics Club | *Vice President* **March 2025 – April 2026**

- Organized workshops and mentored students in robotics and technical activities.
- Led the national event ROBOLUTION **5.0** and managed the SoccerBot Championship with **38** teams, **100+** participants, and **15** volunteers.

Grameenphone Ltd. | *Industrial Attachment* **May 2025 – June 2025**

- Completed industrial training with exposure to telecom infrastructure, enterprise security management, and network services.
- Observed system operations and workflow coordination in telecom infrastructure environments.

ICEEICT | *Conference Coordinator* **May 2024**

- Managed registration and participant coordination, oversaw kit distribution, and supported event logistics.

SKILLS

Technical	MS Word, MS Excel, MS PowerPoint, Power BI, LaTeX, Notion, Canva
Programming	Python, MATLAB, C/C++, PostgreSQL
Engineering	PSpice, Proteus, CST Studio Suite, ETAP, AutoCAD, SolidWorks, Arduino, OrCAD, Cadence
Language	Bengali (Native), English (Professional)
Soft Skills	Presentation, Leadership, Organization, Communication, Problem Solving

AWARDS & CERTIFICATIONS

2022–2026	**Dean's List Certificate** — awarded in all four academic years; top 10% of cohort.
2024	**2nd Place** — "Beyond Silicon: Optical Neural Network" Poster Competition, IEEE SB DU.
2024	**Outstanding Volunteer** — Registration Team, ICEEICT 2024 International Conference.
2023	**Python Certification Course** — Military Institute of Science and Technology.
2021	**National Board Scholarship** (HSC).
2019	**National Board Scholarship** (SSC).

REFERENCES

Kazi Newaj Faisal, PhD | *Associate Professor*

- Phone: +8801769009270
- Organization: Military Institute of Science and Technology
- Department: Electrical, Electronics and Communication Engineering (EECE)
- Email: newajfaisal@gmail.com

Md Aminul Islam, PhD | *Associate Professor*

- Phone: +8801717481144
- Organization: Military Institute of Science and Technology
- Department: Electrical, Electronics and Communication Engineering (EECE)
- Email: aminul@eece.mist.ac.bd